Claims:

1. A method for arranging the motion of a handling device (1), having at least one final control element (2) movable about one or more axes by means of a controller (6), in which

a) an optically detectable object (5) and a motion sequence (7) referred to the object (5) are specified to the controller (6) of the handling device (1) or of an image processor;

b) the range of motion and/or working range of the handling device (1) is recorded with a camera (3, 9);

c) the recorded image is evaluated with an image processor, such that the specified object (5) is detected, and its position and/or motion status, in particular relative to the handling device (1), is determined;

d) from the position and/or motion status of the detected object (5) and the motion sequence (7) referred to the object (5), the controller (6) or the image processor calculates a control command for one or more final control elements (2) of the handling device (1);

e) in accordance with the control command, the controller (6) outputs an adjustment command to each final control element (2) to be moved; and

f) method steps b) through e) are performed again.

2. The method as defined by claim 1, characterized in that the object (5) itself

is moved, and its location and speed are detected upon the ascertainment of the motion status of the object (5).

3. The method as defined by claim 1 or 2, characterized in that the motion of the object (5) and the motion of the handling device (1) are superimposed.

4. The method as defined by one of claims 1 through 3, characterized in that the motion sequence (7) is stored in memory as a train of control commands ascertained during the execution of the motion of the handling device (1).

5. The method as defined by claim 4, characterized in that the motion of the handling device (1) is effected on the basis of a train of control commands stored in memory.

6. The method as defined by claim 4 or 5, characterized in that a plurality of different motion sequences (7) are storable in memory, each as a train of control commands.

7. The method as defined by one of the foregoing claims, characterized in that the selection of a control command or of a train of control commands depends on the type, the position and/or motion status of the detected object (5).

8. The method as defined by one of the foregoing claims, characterized in that the motion of the handling device (1) is monitored on the basis of the images recorded.

9. The method as defined by one of the foregoing claims, characterized in that tasks to be executed by the handling device (1) are associated with the motion sequence (7) referred to the object (5).

10. The method as defined by one of the foregoing claims, characterized in that the image processing and/or the calculation of a control command are done in real time.

11. The method as defined by one of the foregoing claims, characterized in that the image recording is effected by means of a camera (9, 3) that is stationary and/or moved along with the handling device.

12. An image processor, in particular for a method for arranging the motion of a handling device (1) as defined by one of claims 1 through 11, in which an object (5), recorded by means of at least one camera (3, 9), in an image is detected; the position of the object (5) is determined spatially and chronologically and/or its speed is ascertained; a relationship of the position and/or speed of the object (5) to the position and/or speed of a handling device (1) is determined; and this relationship is sent onward to the controller (6) of the handling device, in particular for executing a motion sequence (7) referred to the object (5).

13. The image processor as defined by claim 12, characterized in that the relationship is formed, particularly in the form of a deviation vector, from the difference between the positions of the object (5) and the handling device (1).

14. The image processor as defined by claim 12 or 13, characterized in that the relationship is formed, particularly in the form of a relative speed vector, from the difference between the speeds of the object (5) and the handling device (1).

15. The image processor as defined by one of claims 12 through 14, characterized in that the camera (3, 9) is positioned above the object (5) and tracks along with a motion of the object (5); the camera motion is recorded , and

this recording is converted into motion information for the handling device (1).

16. The image processor as defined by claim 15, characterized in that motion information includes chronological, spatial, and/or speed information.